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Declarations under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for all designations*

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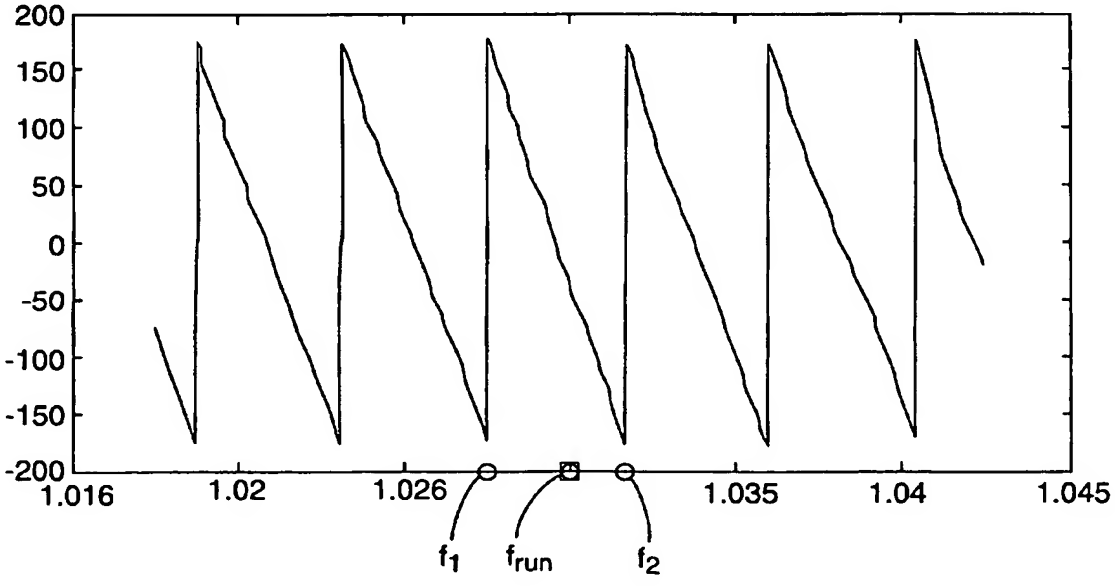
(54) Title: ESTIMATING PROPAGATION VELOCITY THROUGH A SURFACE ACOUSTIC WAVE SENSOR



(57) Abstract: Techniques are described for estimating the propagation velocity through a surface acoustic wave sensor. In particular, techniques which measure and exploit a proper segment of phase frequency response of the surface acoustic wave sensor are described for use as a basis of bacterial detection by the sensor. As described, use of velocity estimation based on a proper segment of phase frequency response has advantages over conventional techniques that use phase shift as the basis for detection.

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